

ABSTRACT OF THE INVENTION

A method of detecting binding interactions and target molecules, such as proteins, protein fragments, recombinant proteins, recombinant protein fragments, extracellular matrix proteins, ligands, carbohydrates, steroids, hormones, drugs, drug candidates, immunoglobulins and receptors of eukaryotic, prokaryotic or viral origin, by mediated electrochemistry using labels that react with transition metal mediator complexes in a detectable catalytic redox reaction. These labels are attached directly to binders, target molecules, surrogate target molecules, or to affinity ligands capable of binding to the target or to surrogate target molecules capable of competing with the target for binding to another binder. The labels can be naturally present (endogenous) in the binder, target or affinity ligand, or constructed by the covalent attachment of the label to the binder, target, affinity ligand or surrogate target (exogenous).